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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/559,206 | 04/26/2000 | Daniel Manhung Wong | OR00-01101 | 1513 |

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PARK, VAUGHAN & FLEMING LLP
508 SECOND STREET
SUITE 201
DAVIS, CA 95616

EXAMINER

TO, BAOQUOC N

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2172

DATE MAILED: 11/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 09/559,206 | Applicant(s) WONG, DANIEL MANHUNG | |
| | Examiner Baoquoc N To | Art Unit 2172 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-24 are pending in this application.

Response to Arguments

2. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4-5, 7-9, 12-13, 15-17, 20-21 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maier et al (US. Patent No. 5,625,815) in view of Park et al. (US. Patent No. 6,064,951).

Regarding on claims 1, 9, and 17, Maier teaches method for selectively auditing accesses to a relational database, comprising:

receiving a query for the relational database [col. 3, lines 65-67];

automatically modifying the query prior to processing the query, so that processing the query causes an audit record to be created and recorded for rows in relational tables that are accessed by the query and that satisfy an auditing condition [col. 4, lines 10-12];

processing the modified query to produce a query result [col. 6, lines 35-39],
wherein

processing the modified query includes, creating the audit record for rows in
relational tables that are accessed by the query and that satisfy the auditing condition
[col. 8, lines 28-29], and

recording the audit record in an audit record store [col. 4, line 12]; and
returning the query result [col. 6, lines 35-39].

Maier does not teach automatically modifying the query prior to processing the
query. However, Park teaches, "the system automatically transforms the query into a
corresponding query consisting of a target language" (col. 7, lines 40-43). In addition,
Park also teaches, "query transformation system executes its processing before the
processing of the information retrieval system" (col. 7, lines 47-48). This clearly
indicates that the query is being automatically modified or transformed to a another
query prior the processing. Therefore, it would have been obvious to one ordinary skill
in the art at the time of the invention was made to modify the teaching of Park into Maier
because by modifying or transforming the query would allow the system to adapt to any
changes and efficiently create the records according to the changes.

Regarding on claims 4, 12 and 20, Maier teaches retrieving the auditing condition
for a given table from a data structure associated with the given table [col. 6, lines 8-19].

Regarding on claims 5, 13 and 21, Maier teaches the query modifies at least one entry in the relational database, using a relational database system trigger to create and record the audit record for the modification to the relational database [col. 4, lines 10-12].

Regarding on claims 7, 15 and 23, Maier teaches the audit record includes:

a user name for a user making the query [col. 6, line 4];

a time stamp specifying a time of the query [col. 6, lines 4-10]; and

a text of the query [col. 6, lines 15-18].

Regarding on claims 8, 16 and 24, Maier teaches the auditing condition includes a condition for a field within the relational database [col. 5, lines 2-3].

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4. Claims 2-3, 6, 10-11, 14, 18-19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maier et al (US. Patent No. 5,625,815) in view of Park et al. (US. Patent No. 6,064,951) and further in view of Cochrane et al. (US. Patent No. 5,987,455).

Regarding on claims 2, 10, and 18, Maier and Park teaches the claimed subject matter excepting the query includes a select statement, inserting a case statement into the select statement that calls a function that causes the audit record to be created and recorded if the auditing condition is satisfied. However, Cochrane teaches, SELECT 1 FROM VALUES (1)

WHERE 1>CASE WHEN EXIST (SQL-stmt1 WHERE 1=0)

THEN

....

WHEN EXIST (SQL-stmtn WHERE 1=0)

THEN 1

ELSE 1 END" [col. 8, lines 55-50];

This teaches that the case statement is inserted in the selected SQL statement to call the function. Cochrane does not teach the function that causes audit record to be created and recorded if the auditing condition is satisfied. However, this function can be modified to accommodate the requirements by putting the required parameters to create the auditing records. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to include teaching of Cochrane into Maier and Park because inserting the case statement in to the SELECT statement in Cochrane to allow the function to create auditing records.

Regarding on claims 3, 11, and 19, Cochrane teaches ensuring that the case statement is evaluated near the end of the query processing so that the case statement is evaluated only after other conditions of the query are satisfied, so that the audit record is created only for rows that are actually accessed by the query [col. 8, lines 55-60].

Regarding on claims 6, 14, and 22, Cochrane teaches,

- inserting the case statement into the query [col. 8, lines 55-60];
- allowing a query processor to allocate buffers for the query [col. 8, lines 55-60];
- removing the case statement from the query [col. 8, lines 55-60];
- allowing the query processor to generate a query plan for the query; and

scheduling the case statement near the end of the query plan to ensure that the case statement is evaluated only after other conditions of the query are satisfied, so that the audit record is created only for rows that are actually accessed by the query [col. 8, lines 55-60].

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is (703) 305-1949 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached at (703) 305-4393.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is assigned are as follow:

- (703) 746-7238 [After Final Communication]
- (703) 746-7239 [Official Communication]
- (703) 746-7240 [Non-Official Communication]

Hand-delivered responses should be brought to:

Crystal Park II
2121 Crystal Drive
Arlington, VA 22202
Fourth Floor (Receptionist).


SANJIV SHAH
PRIMARY EXAMINER

Baoquoc N. To

November 15, 2002